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Wireless Smoke Detection System

Final Report of ECET 491 Senior Design

by

Orlog Neto

April 25, 2006

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ABSTRACT

The wireless smoke detection system includes a plurality of detector units strategically positioned throughout the monitored area. Each of the plurality of detector units include a detector for sensing one of a characteristic and condition within a section of the monitored area and generating a signal indicative of the monitored. A signal processor is connected within each detector unit for analyzing the signal generated by the detector and upon determining if the signal is above a predetermined level generating an emergency signal.

A transmitter is provided for transmitting the emergency signal to a plurality of receiver units strategically positioned about the monitoring area. Each receiver unit includes an alarm for generating an alarm signal and thereby alert persons to the emergency situation at a position within the monitored area. The detector can be at least one of a photoelectric smoke detector, an ionization type detector, a combination carbon monoxide and smoke detector, a carbon monoxide detector, a near infrared detector and a hazard detector.

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